REMARKS/ARGUMENTS

Claims 1, 2, 4-10, 12-14, 16-22, 30, 31, 33-39, 41-43 and 45-51 are pending in the

application. Claims 6, 10 and 31 are amended and no claims have been cancelled or added. The

amendments to the claims as indicated herein do not add any new matter to this application.

I. EXAMINER INTERVIEW

On April 17, 2007, a telephone interview was conducted with the Examiner. Examiners

Dennis L. Vautrot and Kuen S. Lu and Applicant's representatives, Brian D. Hickman and

Robert S. Chee, participated. Applicant proposed amendments to Claims 6 and 10 and also

addressed the 35 USC §102 rejection of Claims 6 and 10.

Applicant distinguished Claim 6 from Menon by pointing out the limitation within Claim

6, "constructing in volatile memory data structures that indicate the custom attributes of said

particular object type." In Menon, the data structure is generated to the level of the object

instance. Menon states that for the data structure generated, the information includes the type,

value, and name of the object. Because the *value* of each attribute is included, a data structure

must be made *for each instance of the object.*

Applicant furthered his argument by presenting amended Claim 6 "in response to a

subsequent request to access a different object instance of said particular object type, inspecting

said data structures, without accessing said catalog table, to determine the custom attributes of

said particular object type." In Menon, if there is a subsequent request *to access a different*

object instance, the server must obtain that data by returning to the catalog table (or Vault, as

used in Menon) because the data structure contains information only about a particular object instance. Only if the object instance was the same instance would the server in Menon not need to re-access the information in the vault.

Examiner agreed to re-consider the claims once an RCE is filed with the proposed amendments. Applicant has agreed to make the proposed amendments in Claims 6 and 10 with an RCE request and also to clarify the terms "default attributes" and "custom attributes" in the claims. Applicant has also agreed to provide arguments as to why Claim 1 (which was previously allowed) is patentable.

CLAIMS REJECTIONS--35 U.S.C. § 101

Claims 24-52 are rejected initially rejected under 35 U.S.C. § 101 in the first Office Action as being unpatentable because the claimed invention is directed to non-statutory subject matter. It is alleged that computer-readable medium is not tangibly embodied because it includes acoustic and light waves as transmission media. Claim 31 was erroneously not amended in the previous response to the first Office Action. As a result, Claim 31 is amended to "computer-readable *storage* medium" to comply with structural limitation requirements. This rejection is therefore overcome.

CLAIMS REJECTIONS--35 U.S.C. § 102

Claims 6-10, 18-22, 35-39 and 47-51 were rejected under 35 U.S.C. § 102(e) as being allegedly anticipated by U.S. Patent No. 6,615,204 ("Menon"). Claim 1 was originally rejected under 35 U.S.C. § 103(a) as being unpatentable over Menon in view of U.S. Application

Publication No. US 2004/0267744 A1 by Becker et al. ("*Becker*"). These rejections are

respectfully traversed.

CLAIM 1

Claim 1 recites "…[upgrading application by] creating a first replacement table to hold

the data from said first table; copying the data from said first table to said first replacement table,

wherein *data from said one or more default attributes* of said first object type is copied from

said first table into said first replacement table" (emphasis added). *Becker* discloses that the

destination table is copied to a copy of the destination table in a second database system. *Becker*

does not mention the use of *default attributes*, much less copying default attributes from a first

table to a replacement table during an upgrade. Furthermore, the context of *Becker* may be to

upgrade a database system, but *Becker* is only concerned with changing the data structure in a

program, not to upgrade a table while maintaining default and custom attributes. Thus the

limitation of Claim 1 is not taught or disclosed in *Becker*.

Claim 1 continues "deleting said first table". The Office Action states that *Becker* does

not explicitly disclose that the first table is deleted but that an option is to keep the copy of the

destination table, and thus deletion of the *destination* table is inherent. However, previously, the

Office Action equated the destination as the first replacement table. The *destination table* is not

the table to be deleted, it is the *first table* to be deleted. Thus, the limitation to delete said first

table is not taught or disclosed within *Becker*.

Claim 1 continues by stating similar limitations for the second table to be copied and

deleted as those stated for the first table. *Becker* teaches that "the description allows a person

skilled in the art to adapt the method to a plurality of tables as well" implying that *Becker's*

teachings may be applied to copying other tables. However, *Becker* failed to teach or disclose

each of the limitations recited for the first table. As a result, the limitations for the second table

are also not taught or disclosed by *Becker*.

Claim 1 concludes "retaining, in said third table, values for said first custom attribute of

said first object type and said second custom attribute of said second object type". The Office

Action alleges *Menon* teaches retaining the third table and that this is disclosed within Fig. 11.

However, there is no suggestion within *Menon* that the third table should be retained during an

upgrade of the application. Indeed, upgrading is not even mentioned within *Menon*. Simply

viewing a representation of a table within a figure does not disclose the action of retaining the

third table in the event of an application upgrade. Thus *Menon* and *Becker* fail to teach or

disclose every element of Claim 1 and the rejection of Claim 1 is traversed.

CLAIM 6

Independent Claim 6 recites "based on the information from said catalog table,

constructing in volatile memory data structures that indicate the custom attributes of said

particular object type". Thus, in Claim 6, a data structure is generated for each particular object

type. The Office Action alleges that *Menon* teaches this limitation in "once in memory, a client

uses accessor methods of AmsBase to get individual attributes of a data object." In *Menon*, the

data structure is generated to the level of the object instance. This is shown as *Menon* states that

when a data object is checked out from the Vault repository as an AMsBasePL object, the dat

object's metadata are manifested as a property list. A property in a property list consists of three

elements: (1) a name, which is the name of the attribute, (2) *a value, which is the value of the*

attribute, and (3), a type, which is the type of the attribute's value. (emphasis added) (*Menon*,

Col. 27, lines 17-26). Because the values of the object attributes are included, the data is stored

to the level for each object instance of the data object checked out and a data structure must be

made *for each instance of the object.*

For example, for an object "employee" with attributes "name" and "dept", there are two

object instances, one with name "Fred" and dept "Acct". Another object instance is "Chris"

with dept "Acct". *Menon* would need to generate two distinct data structures, one for an instance

of "Fred," and one for an instance of "Chris." Claim 6 would only generate a single data

structure as data structures are only generated *for each particular object type* and "Fred" and

"Chris" are the same *object type.*

Furthermore, amended Claim 6 recites "in response to a subsequent request to access *a*

different object instance of said particular object type, inspecting said data structures, without

accessing said catalog table, to determine the custom attributes of said particular object type."

This limitation clarifies that data structures in Claim 6 are created at the level of the particular

object type and that any subsequent access *of said particular object type* only needs to inspect the

data structures generated. In contrast, if there is a subsequent request *to access a different object*

instance in *Menon*, the server must obtain that data by returning to the catalog table (or Vault, as

used in <u>Menon</u>) because the data structure contains information only about *an object instance.*

Only if the object instance was the *same instance* would the server in *Menon* not need to re-

access the information in the vault. Thus *Menon* fails to teach or disclose every element of

Claim 6 and the rejection of Claim 6 is traversed.

In addition, referring back to the Claim 6 limitation "constructing in volatile memory data

structures that indicate the custom attributes of said particular object type," the data structures are

of different object types to indicate the custom attributes. Thus a data structure for one particular

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object type is different than the data structure for another particular object type because the data structure *indicates the custom attributes*. In *Menon*, all of the data structures generated are of the same AMsBase object or a subtype of it, varying only by the property list within the object. Thus data structures in *Menon* do not vary. Because *Menon* fails to teach or disclose that *different* data structures are generated, the rejection of Claim 6 is traversed. Thus reconsideration of the rejection on Claim 6 is respectfully requested.

CLAIM 10

Independent Claim 10 includes the same limitations as recited in Claim 6 of "based on the information from said catalog table, constructing in volatile memory data structures that indicate the custom attributes of each of said plurality of object types; and in response to a request to access a different object instance of a particular object type of said plurality of object types, inspecting said data structures, without accessing said catalog table, to determine the custom attributes of said particular object type."

As a result, the arguments presented for Claim 6 above also apply to Claim 10. As *Menon* fails to teach or disclose every element of Claim 6, *Menon* also fails to teach or disclose every element of Claim 10. The rejection of Claim 10 is traversed and reconsideration of the rejection on Claim 10 is respectfully requested.

DEPENDENT CLAIMS

Claims 2, 4 and 5 are dependents of independent Claim 1. Claims 7-9 are dependents of independent Claim 6. Claims 13, 14, 16 and 17 are dependents of independent Claim 12. Claims 19-21 are dependents of independent Claim 18. These dependant claims also include the

limitations of claims upon which they depend. These dependant claims are patentable for at least those reasons the claims upon which the dependant claims depend are patentable. Thus reconsideration of the rejection on these claims is respectfully requested. Claims 30, 31, 33-39, 41-43 and 45-51 are the computer readable medium forms of Claims 1,2, 4-10, 12-14, 16-22 and should also be allowed.

CONCLUSION

For the reasons set forth above, it is respectfully submitted that all of the pending claims are now in condition for allowance. Therefore, the issuance of a formal Notice of Allowance is believed next in order, and that action is most earnestly solicited.

The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present application.

Please charge any shortages or credit any overages to Deposit Account No. 50-1302.

Respectfully submitted,

Hickman Palermo Truong & Becker LLP

Dated: 5/7/07

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